

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A local communications network providing communication between a mobile station and a fixed radio frequency station, the local communications network comprising:

a relay antenna; and

a wireless radio frequency transmission link which links the relay antenna to the fixed radio frequency station ~~without any wired connection intervening between the relay antenna and the fixed radio frequency station~~, wherein the wireless radio frequency transmission link includes, at the relay antenna, a demodulator removing the carrier from the high frequency signal received by the relay antenna.

2. (Currently Amended) The local communications network in accordance with Claim 1, wherein the wireless radio frequency transmission link includes means for transmitting and receiving signals at selectable frequencies ~~between~~ in a range from 400 MHz and to 18 GHz.

3. (Previously Presented) The local communications network in accordance with Claim 2, wherein the wireless radio frequency transmission link includes a first electronic device associated with the relay antenna and a second electronic device associated with the fixed radio frequency station and a wireless transmission channel connecting the first and second electronic devices.

4. (Previously Presented) The local communications network in accordance with Claim 3, wherein the first electronic device includes means for analog/digital

conversion and the second electronic device includes means for digital/analog conversion.

5. (Previously Presented) The local communications network in accordance with Claim 3 wherein the first and second electronic devices include means for compressing or decompressing the signal to be transmitted.

6. (Currently Amended) The local communications network in accordance with Claim 3, wherein

the relay antenna includes a multiband antenna, ~~wherein~~ and
the first electronic device includes means for identifying a channel on which signals to be transmitted are received by the multiband antenna.

7. (Previously Presented) The local communications network in accordance with Claim 3, wherein the first electronic device includes means for verifying presence of a fixed radio frequency station functioning at a frequency at which signals to be transmitted are received by the relay antenna.

8. (Previously Presented) The local communications network in accordance with Claim 1, including a plurality of fixed radio frequency stations, each fixed radio frequency station functioning at a predetermined frequency and communicating with a multi-band antenna.

9. (Previously Presented) The local communications network in accordance with Claim 4, wherein the first and second electronic devices include means for compressing or decompressing the signal to be transmitted.

10. (Currently Amended) The local communications network in accordance with Claim 4, wherein

the relay antenna includes a multiband antenna, ~~wherein~~ and
the first electronic device includes means for identifying a channel on which
signals to be transmitted are received by the multiband antenna.

11. (Currently Amended) The local communications network in accordance
with Claim 5, wherein

the relay antenna includes a multiband antenna, ~~wherein~~ and
the first electronic device includes means for identifying a channel on which
signals to be transmitted are received by the multiband antenna.

12. (Previously Presented) The local communications network in accordance
with Claim 4, wherein the first electronic device includes means for verifying
presence of a fixed radio frequency station functioning at a frequency at which signals
to be transmitted are received by the relay antenna.

13. (Previously Presented) The local communications network in accordance
with Claim 5, wherein the first electronic device includes means for verifying
presence of a fixed radio frequency station functioning at a frequency at which signals
to be transmitted are received by the relay antenna.

14. (Previously Presented) The local communications network in accordance
with Claim 6, wherein the first electronic device includes means for verifying
presence of a fixed radio frequency station functioning at a frequency at which signals
to be transmitted are received by the relay antenna.